

What is claimed is:

1. An instrument for testing a CATV network, the instrument including
5 an input port for receiving first information from the network, a computer coupled to the input port for processing the first information received from the network, a user interface permitting a user to create second information for communication over the network, and a serial port for coupling the second information to the network.
- 10 2. The instrument of claim 1 wherein the serial port is an RS-232 port.
3. The instrument of claim 1 further including an RF section for processing signals received from the CATV network.
- 15 4. The instrument of claim 3 further including an analog-to-digital (A/D) converter, the A/D converter coupled to the RF section for conversion of RF section output into digital RF-related signals.
5. The instrument of claim 4 further including a digital signal processor (DSP), the A/D converter coupled to the DSP for processing of the digital RF-related signals.
- 20 6. The instrument of claim 1 wherein the first information is first analog information, the instrument further including an analog-to-digital (A/D) converter for converting the first analog information to first digital information.
7. The instrument of claim 6 further including a digital signal processor (DSP), the A/D converter coupled to the DSP for processing the first digital information.
- 25 8. The instrument of claim 1 further including an audio transducer coupled to the computer for producing audio signals in response to third information received from the computer.
- 30 9. The instrument of claim 8 further including a digital-to-analog (D/A) converter coupled between the computer and the audio transducer for converting the third information into signals to be transduced by the audio transducer.

10. The instrument of claim 9 further including a digital signal processor (DSP) coupled to the computer and to the D/A converter for processing third information and for supplying processed third information to the D/A converter.

5 11. The instrument of claim 1 further including a signature pad coupled to the serial port permitting transmission of signature pad-related signals over the network

12. The instrument of claim 11 wherein the signature pad is coupled to the serial port through the computer.

10 13. An instrument for testing a CATV network, the instrument including an input port for receiving first information from the network, a computer coupled to the input port for processing the first information, a signature pad permitting a user to enter handwritten communication for transmission over the network, and a port for coupling handwritten communication-related signals to the network.

15 14. The instrument of claim 13 wherein the first information is first radio frequency (RF) analog information, the instrument further including an RF section coupled to the input port for processing the first information.

20 15. The instrument of claim 14 further including an analog-to-digital (A/D) converter, the A/D converter coupled to the RF section for conversion of RF section output into digital RF-related signals.

16. The instrument of claim 15 further including a digital signal processor (DSP), the A/D converter coupled to the DSP for processing of the digital RF-related signals.

25 17. The instrument of claim 13 wherein the first information is first analog information, the instrument further including an analog-to-digital (A/D) converter for converting the first analog information to first digital information.

18. The instrument of claim 17 further including a digital signal processor (DSP), the A/D converter coupled to the DSP for processing the first digital information.

30 19. The instrument of claim 13 further including an audio transducer coupled to the computer for producing audio signals in response to third information received from the computer.

20. The instrument of claim 19 further including a digital-to-analog (D/A) converter coupled between the computer and the audio transducer for converting the third information into signals to be transduced by the audio transducer.

21. The instrument of claim 20 further including a digital signal processor (DSP) coupled to the computer and to the D/A converter for processing third information and for supplying processed third information to the D/A converter.

22. The instrument of claim 13 wherein the port includes a serial port.

23. The instrument of claim 22 wherein the port includes an RS-232 port.

24. The instrument of claim 22 wherein the port includes an ethernet interface.

25. An instrument for testing a CATV network, the instrument including an input port for receiving first information from the network, a computer coupled to the input port for processing the first information, a user interface permitting a user to create second information for communication over the network, and an ethernet interface for coupling the second information to the network.

26. The instrument of claim 25 including a Web browser capable of handling internet communication protocols.

27. The instrument of claim 25 further including a signature pad coupled to the serial port permitting transmission of signature pad-related signals over the network

28. The instrument of claim 27 wherein the signature pad is coupled to the serial port through the computer.

29. The instrument of claim 25 wherein the first information is first analog information, the instrument further including an analog-to-digital (A/D) converter for converting the first analog information to first digital information.

30. The instrument of claim 29 further including a digital signal processor (DSP), the A/D converter coupled to the DSP for processing the first digital information.

31. The instrument of claim 25 wherein the first information is first radio frequency (RF) analog information, the instrument further including an RF section coupled to the input port for processing the first information.

32. The instrument of claim 31 further including an analog-to-digital (A/D) converter, the A/D converter coupled to the RF section for conversion of RF section output into digital RF-related signals.

33. The instrument of claim 32 further including a digital signal processor (DSP), the A/D converter coupled to the DSP for processing of the digital RF-related signals.

34. The instrument of claim 1 including a Web browser capable of handling internet communication protocols.

35. The instrument of claim 13 including a Web browser capable of handling internet communication protocols.

36. The instrument of claim 1 wherein the input port and output port are RF ports.

37. The instrument of claim 13 wherein the input port and output port are RF ports.

38. The instrument of claim 25 wherein the input port and output port are RF ports.

39. An instrument for determining received signal power, the instrument including a receiver for receiving the signal, and a device for multiplying the received signal amplitude by the sine and cosine, squaring these products, and adding the squared products together to produce an indication of the received signal power.

40. The instrument of claim 39 further including an analog-to-digital (A/D) converter coupled to the receiver for sampling the received signal amplitude and to the device for providing sampled received signal amplitudes to the device for multiplying by the sine and cosine.

41. A method for determining received signal power, the method including receiving the signal, multiplying the received signal by the sine and cosine, squaring the products of these multiplications, adding the squared products, and producing an indication of the received signal power.